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**CEMOPLAF/Ecuador
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**Introduction of Depo-Provera
in CEMOPLAF Program**

FINAL REPORT

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The Population Council seeks to improve the wellbeing and reproductive health of current and future generations around the world and to help achieve a humane equitable and sustainable balance between people and resources. The Council ■ analyzes population issues and trends ■ conducts biomedical research to develop new contraceptives, ■ works with public and private agencies to improve the quality and outreach of family planning and reproductive health services ■ helps governments to influence demographic behavior ■ communicates the results of research in the population field to appropriate audiences ■ and helps build research capacities in developing countries. The Council a nonprofit nongovernmental research organization established in 1952 has a multinational Board of Trustees its New York headquarters supports a global network of regional and country offices.

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E X E C U T I V E S U M M A R Y

of

The Report on the Research Project

"Introduction of Depo-Provera in CEMOPLAF Program"1 Background

The Centro Medico de Orientacion y Planificacion Familiar (CEMOPLAF) and the Population Council jointly carried out an operations research project in 8 of CEMOPLAF's clinics in Ecuador with a view to design appropriate strategy for introducing Depo-Provera in the family planning program of the country

2 Salient Findings

Adding DMPA appears to have divided rather than increased the market for hormonal contraceptives. Older and therefore, possibly more motivated women opted for DMPA while younger, lower parity and possibly less motivated women chose the pill.

The major reasons for adding DMPA appear to be (1) that there is a cost advantage to the program to shift pill users to DMPA, and (11) DMPA users experience slightly fewer side-effects overall, and fewer accidental pregnancies, implying that DMPA is, for certain women, a better option than the pill.

An important operational finding of the study is that injections to re-visiting DMPA users should be administered by paramedical staff. This reduces institutional costs and client waiting period which, in turn, may encourage longer method continuation.

3 Objectives

(1) Assess Depo-Provera's acceptability among clients of the clinics,

(11) Analyze relevant characteristics of the Depo-Provera users, to determine whether this method complements or competes with other contraceptives,

(111) Compare clinical conditions and follow-up requirements of Depo-Provera with those of oral contraceptives,

(iv) Test comparative efficiency and cost-effectiveness of Depo-Provera and other contraceptives,

(v) Make appropriate and useful information available to the directors of the family planning programs, to serve as inputs for designing strategies to provide a wider range of contraceptives

3 Methodology

The overall direction for this research project (including the responsibility for the activities at the clinics covered by this project) was provided by Dr Teresa Vargas while the technical guidance was given by Dr Marta Salazar. The chief investigator was Mr Ernesto Pinto. Continuous technical advice was also received from Drs J Foreit and J Bratt of the Population Council and Family Health International, respectively.

The clinic sample was purposive in that those clinics where the highest number of pill users in the prior year were registered, were selected. These were 3 centers from the coastal region, namely, the ones in Santo Domingo, Quevedo and Esmeralda, and 5 from the mountain region, namely, Tulcan, Quito (No 14), COP, Riobamba and Cajabamba.

New clients of the above clinics during the period August 1993 and March 1994, who opted for either Depo-Provera or oral pills and old clients who switched to one of these two methods were included in this study. The total sample of this study amounted to 1315 clients. Clinical follow-up of these clients was carried out until December 1994.

At the very outset clients were interviewed through a structured questionnaire for their demographic characteristics, especially fertility related data including experience with prior contraception. A follow-up data sheet was set up for each respondent for information that was collected during each successive check-up with respect to the contraceptive that was being used and was attached to the clients' clinical history sheets. A separate questionnaire to enquire about satisfaction with the method being used was also filled out. A subsample of 382 women who failed to show up for the scheduled check-ups was

also interviewed in their communities, at the end of the study, for missing information from their records

4 Results

The four critical areas covered by this study were method acceptability, satisfaction with the method used, clinical follow-up and continuation of method-use

It is to be noted that the size of each sub-group of clients, namely, those who opted for oral pills as against those for Depo-Provera, was well balanced thereby minimizing possibility of errors due to differential sample size. The distinguishing demographic characteristics of these two groups of clients were

(a) oral pill acceptors were on an average younger than Depo-Provera users (24 years versus 27),

(b) as regards level of education, while a higher percentage of pill users (55 versus 46) had completed higher secondary, the percentage who went for university education (17 versus 13) or just completed elementary school (37 versus 32) was higher among Depo-Provera users,

(c) as regards employment status 78% of pill users worked at home while 71% on Depo-Provera belonged to this category,

With respect to fertility levels, differences between these two groups of clients measured through average number of pregnancies, live births, abortions and the latest pregnancy outcome were minimal. However, a slightly higher proportion of pill users wanted more children (55%) as against Depo-Provera users (52%) which is, in part, a reflection of the higher average age of the latter group.

Method Acceptability

A higher proportion of Depo-Provera acceptors, as compared to pill users, had prior experience with other contraceptive(s) - 61% Depo-Provera users as against 39% pill users. A higher percentage of clients who had used IUDs in the prior month (58%) accepted oral pills as compared to those who selected Depo-Provera (33% had used pills and 31% IUDs in the prior month).

Although there were no differentials regarding problems with the earlier method used among these two groups, there was a higher proportion of those who suffered from menstrual problems among pill users as compared to Depo-Provera users (22 versus 14) Reasons for switching over to a different method were about the same among the two groups, namely, better security with the method selected

Contraceptive Use Satisfaction

This information comes from responses from a subsample of clients who went back for clinical check-ups Over 81% of Depo-Provera users were satisfied with their method while 76% of pill users were happy with the pill At the same time, 33% of pill users had problems such as head aches and nausea, among Depo-Provera users only 27% had complaints, such as, shorter menstrual cycles (55%) and a third of these clients also suffered from excessive bleeding Consequently, a higher proportion of pill users (29%) switched over to other method(s) or totally dropped out (7%), compared to Depo-Provera users (21%) who switched and dropped out (2%) In switching over, pill users (4%) preferred IUD and an equal proportion of Depo-Provera users preferred the pill

Clinical Follow-up

In general, introduction of Depo-Provera did not add significantly to the normal trend regarding new users Increase in the number of hormonal method users was not significant during the research period If the number of combined acceptors of IUDs, pills and Depo-Provera is examined it is seen that Depo-Provera did not add to the number of users, however, those who wanted to switch over accepted depo_provera more often than the other two methods It was also noticed that Depo-Provera users went back for check-ups more often than other contraceptive users perhaps because they suffered from menstrual side effects and excessive bleeding Further, where as for other methods women have alternative sources of supply, Depo-Provera supply/check-ups are only available in CEMOPLAF clinics And yet pill users whose

cases were followed up were found to be the worst for check-ups perhaps because they switched over to other methods more often (Average number of check-ups per user per year were 1.6 for Depo-Provera, 1.4 for IUD and 0.6 for the pill) Depo-Provera users considered their method more effective than pill users. Due to protocol errors serious underchecking of clients who went back for supply of pills or further doses of Depo-Provera, occurred. In general, there was a significant proportion of DMPA users who did not return for their supplies/check-ups, the reasons being, excessive waiting period, significant distance of clinic from home and high transportation/perceived opportunity cost, in the same order of importance.

Comparative Continuation Rates

Based on multiple decrement life table technique, it was found that two types of continuation rates were relevant.

(1) Source continuation. CEMOPLAF clients who initiated their contraception with oral pills continued with their method for a longer period than those who started with DMPA. Average continuation period for pill users versus DMPA users was 9.0 and 6.6 months. However, the difference was not statistically significant (prob = 0.1223).

(11) Method continuation. When women who used both CEMOPLAF and other sources of services are considered it is found that those who started with DMPA had a longer average continuation period (23.0 months) as compared to those who started with oral pills (19.0 months). The difference was again not statistically significant (prob = 0.6118).

Among the reasons for abandoning contraception, contraindications such as head ache (18%) and bleeding (27%) were the worst, followed by "personal reasons" and accidental pregnancy (together 39%) among pill users and head ache and "personal reasons" (23% together) among DMPA users. Of the sub-sample of clients who did not return for their check-ups, among pill users 47% and among DMPA users 61% were found to have switched over to other methods and especially to IUD and condom.

From a study of incremental cost per client for each visit starting from acceptance visit, it was found that clients using oral contraceptives incur the highest incremental costs, followed by IUD users and then DMPA clients. Most of the variability in total incremental costs is driven by materials and supplies costs, specifically by the costs of contraceptive commodities.

When information on the first year revenue collected (by CEMOPLAF) from contraceptive users is compared for each of the three methods (Pills, DMPA and IUDs) it is found that pill and DMPA users generate equivalent revenue while IUD users generate considerably less. When net revenue is compared it is found that nurse assisted DMPA users generate 5.5 times the revenue generated by IUD users and 1.6 times the revenue generated by pill users. However, these decline to 5.1 and 1.5 when DMPA users are assisted by doctors, for obvious reasons.

5 Conclusions

- (i) Introduction of Depo-Provera did not add new acceptors since it did not reach non-users,
- (ii) Depo-Provera users were better satisfied with their method than pill users,
- (iii) Depo-Provera was substituted more for pills than for IUD,
- (iv) Depo-Provera users had fewer accidental pregnancies than pill users,
- (v) Depo-Provera users had 3 to 4 times more menstrual problems as pill users,
- (vi) Pill users suffered from a larger number of side-effects such as head aches, nausea and weight gain, than Depo-Provera users,
- (vii) No clear cut advantage could be established with respect to continuation rate/average number of months of use among Depo-Provera users as compared to pill users since differences in continuation rates were not statistically significant,
- (viii) Depo-Provera users returned to the clinics for check-ups more often than pill users,

(ix) Net revenue generated by clients assisted by the auxiliary nurse was the higher than that generated by clients assisted by doctors Net revenue contributed by pill users was less and the least net revenue was generated by IUD users,

6 Recommendations

- (i) CEMOPLAF should consider introducing DMPA in their rural program where options for contraceptives are few,
- (ii) Acceptors should be counselled sufficiently and correctly about menstrual problems and more rigorous protocols should be followed with respects to all check-ups,
- (iii) When there are no contraindications authorized paramedical personnel should ensure that the check-up visits coincide with resupply visits to minimize costs,
- (iv) If DMPA is added to rural CBD program after appropriate research this method may raise contraceptive use and therefore further research should be undertaken on a priority basis,
- (v) CEMOPLAF should find ways of reducing client waiting periods,
- (vi) Since the present techniques of registration underestimate number of check-ups, CEMOPLAF should overhaul this system